

Remarks

I. Introduction

This is in response to the Office Action dated July 24, 2007.

The Office Action stated that the title of the invention is not descriptive. Claim 22 was objected to because of an informality with respect to the phrase “the non-broadcast multiple access network.” Claim 19 was rejected under 35 U.S.C. §112 for insufficient antecedent basis in a limitation. Claims 19 – 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Number 6,314,105 (“Luong”), in view of U.S. Patent Number 5,917,820 (“Rekhter”). Claim 22 was rejected under 35 U.S.C. §103(a) as being unpatentable over Luong in view of Rekhter and further in view of U.S. Patent Number 5,699,347 (“Callon”).

The specification has been amended to amend the title. Claim 19 has been amended in response to the §112 and §103(a) rejections. Claims 20 – 21 have been amended in response to the §103(a) rejection.

Claims 19 – 22 are currently pending.

II. Specification

In response to the Office Action, the title has been amended from “ROUTING OVER LARGE CLOUDS” to “ROUTING OVER LARGE NETWORKS”. In view of this amendment, Applicants request that the Office Action concerning the specification be removed.

III. Claims

Independent Claim 19

Claim 19 was rejected under 35 U.S.C. §112 for insufficient antecedent basis for “other routers” in line 8. In response, Claim 19 has been amended in line 1 to clarify that the communication network comprises a plurality of routers, “A method of operating a first router in a communication network comprising a plurality of routers....” This

amendment is supported in Fig. 1 and on page 7, lines 144 – 146, of the specification, which read, “The network 100 has multiple routers 131 – 137, some of which are coupled to a connection-oriented non-broadcast multiple access (NBMA) network 110.” No new matter has been added. Correspondingly, in previous line 8 (line 9 of amended claim), the phrase “other routers” has been amended to “at least one other router”.

Claim 19 was rejected under 35 U.S.C. §103(a) as being unpatentable over Luong, in view of Rekhter. In order to “establish *prima facie* obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art.” In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Furthermore, “all words in a claim must be considered in judging the patentability of that claim against the prior art.” In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). See also MPEP § 2143.03.

With regard to Claim 19, the Office Action states that Luong discloses assigning a number to each of the interfaces. The term “number” in Luong, however, differs in meaning from the term “number” in Claim 19. In Claim 19, for a specified router, the number assigned to each interface is an arbitrary number, which has local significance only to that router. As stated on page 13, lines 278 – 280, of the specification, “The exact method of assigning these numbers is immaterial and has no permanent significance. The number is local to the router, since other routers can qualify it by appending the OSPF Router ID.” In the sections of Luong specifically cited by the Office Action (col. 6, lines 46 – 47, and Fig. 1B), however, the “network identifier” is shared by multiple routers: “For example, within a non-broadcast, multi-access (NBMA) subnetwork, routers that have common network identifiers are capable of communicating with each other within the same NBMA subnetwork.” In response to the §103 rejection, Claim 19 has been amended to clarify that the “number” in the first claim limitation is a “local number”. No new matter has been added.

The Office Action further states that Luong discloses “grouping the interfaces (routers) into connectivity cases.” As defined on page 12, lines 259 – 261, of the specification, however, “a connectivity class is a set of NBMA interfaces attached to one OSPF router that are connected to a single NBMA network and hence enjoy equivalent

connectivity.” A single connectivity class, therefore, may be associated with multiple interfaces on a single router. Luong does not disclose this limitation.

The Office Action admits that Luong “fails to explicitly show encoding information identifying the interfaces and the connectivity classes into a link state packet.” The Office Action states that Rekhter discloses this limitation. To maintain consistency with the amended first claim limitation, the third limitation of Claim 19 has been amended to clarify that the “information identifying the interfaces” is the “local numbers”. As discussed above, no new matter has been added. The sections of Rekhter cited by the Office Action do not disclose a link state packet encoded with a local number. Luong and Rekhter, either alone or in combination, do not teach all the claim limitations of amended Claim 19. Therefore, amended Claim 19 is allowable.

Dependent Claims

Claim 21 has been amended to have wording consistent with amended Claim 19, on which it depends. The Office Action objected to Claim 22 because of an informality. In response, Claim 22 has been amended to replace the phrase “the non-broadcast multiple access network” with the phrase “the at least one connection-oriented non-broadcast multiple access network”. Claim 20, amended Claim 21, and amended Claim 22 are allowable as being dependent on an allowable independent claim.

IV. No New Matter

As discussed above, amendments to the claims are fully supported by the specification. No new matter has been added.

V. Conclusion

For the reasons discussed above, all pending claims are allowable over the cited art. Reconsideration and allowance of all claims are respectfully submitted.

Respectfully submitted,



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